

## MATERIAL DATA SHEET

### H-NBR

#### GENERAL INFORMATION

H-NBR is an is a hydrogenated acrylonitrile-butadiene rubber commonly known as H-NBR. It has good mechanical properties and good chemical resistance to mineral oils and greases, propane and butane, sulfonated crude oil, water-glycol mixtures and can be used at elevated temperatures.

H-HBR is highly ozone, weathering and aging resistant.

#### MECHANICAL | ELECTRICAL | THERMAL PROPERTIES

Colour:		green
Hardness at 20°:	DIN 53505	Shore A 85 +/-2
Density:	DIN ISO 1183-1	g/cm <sup>3</sup> 1.23
100% Modulus:	DIN 53504	N/mm <sup>2</sup> > 10
300% Modulus:	DIN 53504	N/mm <sup>2</sup>
Tensile strength:	DIN 53504	N/mm <sup>2</sup> > 23
Elongation at break:	DIN 53504	% > 250
Rebound resilience:	DIN 53512	% > 35
Tear strength:	DIN ISO 34-1	N/mm <sup>2</sup> > 6
Abrasion:	DIN 53516	mm <sup>3</sup> < 115
Compression set:*	DIN ISO 815-1	% < 24
Compression set:**	DIN ISO 815-1	% < 26
Compression set:***	DIN ISO 815-1	% < 40
Min. service temperature:		°C - 25
Max. service temperature (short term):		°C + 150 (+170)

\* Compression set @ 23°C, 72 hours, 10% deflexion

\*\* Compression set @ 70°C, 24 hours, 20% deflexion

\*\*\* Compression set @ 100°C, 24 hours, 20% deflexion

#### REMARK

All test methods and values mentioned above are corresponding to ASTM | DIN | ISO standards and have been tested on standardized plates in the laboratory. All tests are made under laboratory conditions.